



## South Coast Air Quality Management District

### Engineering & Compliance

*Policies &  
Procedures*

#### SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

#### MEMORANDUM

**DATE:** December 3, 1986  
**TO:** Sanford M. Weiss, Director of Engineering  
**FROM:** Jo Anne Aplet, Director of Planning /s/ JAA  
**SUBJECT:** Unit Risk Factors for Selected Chemical Species

As requested verbally by Bob Murray and George Ames, we are providing current unit risk factors for substances specified of concern for the proposed T. P. Industrial Inc. groundwater treatment system. In addition, George Ames questioned whether EPA plans to revise the 1,1-dichloroethylene (vinylidene chloride) unit risk factor. On December 3, 1986 Emily Nelson of my staff spoke with Dr. Steven Bayard of EPA's Carcinogen Assessment Group who was a principal author of the present carcinogenicity sections of the Final Health Assessment Document for Vinylidene Chloride (EPA/600/8-83/031F August, 1985). Dr. Bayard is not aware of any move to issue an addendum to the Health Assessment Document to change the unit risk factor or the weight of evidence classification. If any changes are proposed, he stated that he would notify my staff of those proposals.

The following are current unit risk factors for the substances requested:

Species	Unit Risk Factor ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>
1,1,1-Trichloroethane	---
Trichloroethylene	$1.3 \times 10^{-6}$
Perchloroethylene	$5.8 \times 10^{-7}$
Methylene Chloride	$4.1 \times 10^{-6}$
Freon 113	---
1,1-Dichloroethylene (vinylidene chloride)	$5.0 \times 10^{-5}$
1,1,2-Trichloroethane	---
1,1-Dichloroethane	---
1,2-Dichloroethane (Ethylene Dichloride)	$2.2 \times 10^{-5}$
Trans 1,2-Trichloroethylene	---
Chloroform	$2.3 \times 10^{-5}$
Toluene	---

--- no current risk factor published by EPA or DOHS

EN:ts